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Twenty-third session
Geneva, 19–21 November 2014

Draft Report of the Committee on Sustainable Energy on its twenty-third session

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I. Introduction and attendance

1. The Committee on Sustainable Energy focussed its twenty-third session on energy for sustainable development with a view to providing access to affordable and clean energy to all, in line with the "Sustainable Energy for All" (SE4All) initiative of the United Nations Secretary-General, and to help reduce greenhouse gas (GHG) emissions and the carbon footprint of the energy sector. Achieving these objectives is considered essential if the world is to succeed in moving towards cleaner energy systems. Meeting the imperatives of sustainable development and a low carbon economy requires managing energy transitions efficiently and effectively in collaboration with all stakeholders. A sustainable energy system integrates a variety of approaches and technologies to support the three pillars of sustainability: economic, social, and environmental.

2. The twenty-third session of the Committee on Sustainable Energy was held on 19–21 November 2014 in Geneva.

3. Over 140 representatives from the following United Nations Economic Commission for Europe (ECE) member States participated: Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Canada, Croatia, France, Germany, Greece, Hungary, Italy, Kazakhstan, Kyrgyzstan, Latvia, Netherlands, Poland, Portugal, Romania, Russian Federation, Serbia, Switzerland, Turkey, Tajikistan, Ukraine, United Kingdom, United States and from the following non-UNECE states: Egypt, the Islamic Republic of Iran and Pakistan. A representative of the European Union also participated.

4. Representatives of the International Atomic Energy Agency (IAEA), United Nations Environment Programme (UNEP), United Nations Conference on Trade and Development (UNCTAD) and United Nations Framework Convention on Climate Change (UNFCCC) took part.

5. The following intergovernmental and non-governmental organizations were in attendance: ECOWAS Bank for Investment and Development (EBID), European Climate Foundation (ECF), Global Carbon Capture and Storage Institute, International Sustainable Energy Organisation (ISEO), International Centre for Trade and Sustainable Development (ICTSD), International Chamber of Commerce Environment and Energy Commission, International Energy Agency (IEA), IEA Renewable Energy Technology Deployment (RETD), International Gas Union (IGU), International Renewable Energy Agency (IRENA), International Organization for Standardization (ISO) Central Secretariat, Moscow International Petroleum Club (MIPC), Organization for Security and Co-operation in Europe (OSCE), Organization for Security and Co-operation in Europe (OSCE) Office in Tajikistan, Parliamentary Assembly of the Council of Europe, Renewable Energy Policy Network for the 21st Century (REN21), The European Azerbaijan Society (TEAS), United Nations Foundation, United States Energy Association (USEA),World Energy Council (WEC) and World Petroleum Council. Independent experts and representatives of academia and the private sector also attended.

II. Opening and adoption of the agenda (agenda item 1)

Documentation: ECE/ENERGY/95 – Annotated provisional agenda.

6. The Acting Chair of the Committee, Mr. Jürgen Keinhorst (Germany), presented the provisional agenda, which was adopted with Item 2 (Election of Officers) and Item 8(c) Outcomes from the Fifth International Forum on Energy for Sustainable Development of the provisional agenda moved to the second day on 20 November 2014.

7. The Acting Chair informed the Committee that Ms Nataliya Boytsun, Vice-Chair, would chair Items 6 to 9 of the provisional agenda.

III. Election of officers (agenda item 2)

8. The Committee elected Mr. Jarad Daniels (United States) as vice-chair for a period of two years.

9. The term of office of already-elected officials: Mr. Jürgen Keinhorst (Acting Chair, Germany), Mr. Sergio Garribba (Italy), Mr. Talyat Aliev (Russian Federation), Mr. Jean-Christophe Füeg (Switzerland), Mr. Yagshygeldi Kakaev (Turkmenistan) and Ms. Nataliya Boytsun (Ukraine) (all Vice-chairs) is two years from the date of their election, underscoring the desirability, for the sake of ensuring continuity of the Bureau, that not all officers be elected at the same time.

10. The Committee further recommended to strengthen the Bureau of the Committee on Sustainable Energy by integrating in its work the Chairs of the Committee's subsidiary bodies *ex officio*, and requested the Bureau and the secretariat to formalize the arrangement.

IV. High-level segment: Energy for Sustainable Development – Must reality conflict with ambition?

11. The Executive Secretary of ECE opened the high-level segment of the meeting with remarks on a sustainable energy future based on the theme of the twenty-third session of the Committee: Energy for Sustainable Development – must reality conflict with ambition?

12. The Executive Secretary noted that the state of the world economy and the economics of energy are leading to outcomes that conflict with our ambitions. While the global energy map is being redrawn, coal use and hence GHG emissions are increasing, tariffs are rising though quality of service is not, and geopolitics has moved energy security to the forefront. Further, improving energy efficiency has many benefits but is not happening at expected scale. And while renewables are progressively integrating into the global energy mix, there is much more to be done. They still require enduring support. If renewable energy technologies were considered from an integrated systems perspective they could play a much more important role in the future energy mix. Natural gas has not only a key role to play in the future in its own right, but is also an important factor in accelerating the uptake of renewable energy. This session of the Committee was designed to explore the ECE region's options for redirection to sustainable outcomes, including how to take an active role in shaping pathways towards cleaner energy systems and thus the direction of sustainable development.

13. The Executive Secretary shared a video containing a call for action in the context of climate change: Why not? Why not *now*? He explained his commitment to practical action, which prompted him to take a leadership role in signing the Joint Statement of the Executive Secretaries of the United Nations Regional Commissions to the Fifth International Forum on Energy for Sustainable Development (the Joint Statement). In the Joint Statement the Executive Secretaries affirmed that the objectives of energy sustainability are attainable and do not need to contradict more short-term considerations, but only if the world embarks on a determined, collective effort. He noted that he strongly believes this to be the case. The statement is not a prescriptive document but rather an extended menu of policy options for consideration by member States to act. It highlights in particular three key components that are central to this Committee's activities:

(a) Energy efficiency in most countries needs to improve more quickly;

(b) Renewable energy policies need to be redesigned;

(c) Equitable access to modern energy services requires mobilising adequate resources.

14. The menu of policy options falls into eight categories including: (i) Energy market reform, (ii) Energy efficiency, (iii) Renewable energy, (iv) Energy access, (v) Energy security, (vi) Finance and investment, (vii) Technology, and (viii) Energy data, indicators and analysis.

15. The Joint Statement is a roadmap for achieving the objectives of the SE4All Initiative of the Secretary-General of the United Nations and for greening the energy sector and the economy as a whole. The ECE secretariat stands ready to assist its member States in developing their sustainable energy action plans and to work on developing standards for energy efficiency and renewables. The Executive Secretary asked that the Committee on Sustainable Energy consider endorsing the Joint Statement in recognition of the powerful message that the document sends, having been signed by all five Executive Secretaries.

16. The Executive Secretary of ECE noted that the Committee's activities are conceived with a view to providing access to affordable and clean energy to all, in line with the SE4All initiative, and to help reduce GHG emissions and the carbon footprint of the energy sector. Going forward it will be necessary to work to enhance attainment of the Sustainable Development Goals related to energy that are under discussion:

(a) by 2030 ensure universal access to sustainable modern energy services for all;

(b) increase substantially the share of renewable energy in the global energy mix by 2030;

(c) double the global rate of improvement in energy efficiency by 2030;

(d) by 2030 enhance international cooperation to facilitate access to clean energy research and technologies, including renewable energy, energy efficiency, and advanced and cleaner fossil fuel technologies, and promote investment in energy infrastructure and clean energy technologies; and

(e) by 2030 expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries.

17. Meeting the imperatives of sustainable development and a low carbon economy requires managing energy transitions efficiently and effectively in collaboration with all stakeholders. A sustainable energy system integrates a variety of approaches and technologies to support the three pillars of sustainability: economic, social, and environmental. ECE is well-placed to support this agenda given our capabilities to develop the normative instruments such as standards that are necessary to incite the needed investment. In all of these areas, ECE's work on development of normative instruments is expected to have a direct, material impact and to catalyse or accelerate the transition to a sustainable energy future.

V. Introductory statement and keynote address (agenda item 3)

18. The twenty-third session of the Committee aimed to explore the ECE region's opportunities for redirecting itself to sustainable outcomes and to build on the many good examples that contribute to an ever-growing choice of successful policy measures. However, taking a closer look at collective progress, reality still conflicts with ambition, particularly in relation to the uptake of energy efficiency.

19. Three keynote speakers explored the main themes of the Committee session. The speakers were supported by an extended panel that provided additional perspectives on the questions that were raised. The overall theme of the session was that current trends appears to conflict with our ambitions, and the task set before the high-level segment was to explore if that perception was reality.

20. The first speaker, the Executive Secretary of the World Energy Council (WEC), presented the latest WEC scenarios about energy transitions in view of increasing uncertainty and complexity in the world. The key themes in his presentation were that the role of coal is shifting from that of cheap coal to uncertain coal, energy efficiency is very difficult because of the policy imperatives, and successful outcomes will necessarily balance three distinct dimensions: energy security, energy equity, and environmental sustainability. The panel then explored the global energy challenge and what a sustainable energy system might resemble and turned to the challenges of defining the priorities and designing pathways to move towards a sustainable energy system.

21. The second speaker, the Deputy Minister of Energy of the Russian Federation, spoke to the challenges of securing affordable and sustainable energy and the preconditions that exist at a regional level to enable needed investments. These preconditions include stable and reliable interconnections with development of vital infrastructure and a systematic and non-discriminatory policy approach that allows enduring market efficiency.

22. The panel then explored the systems perspective that would be required, reinforcing links among energy efficiency, renewable energy, fossil fuels, and electricity. The challenges involve mind-set changes that range from energy efficiency to rational end-use of energy to rational policy setting. The panel then discussed possible pathways towards an integrated, rational energy system including energy security and energy access and how to get the necessary political ownership to deliver the outcomes.

23. The third speaker from KPMG International spoke to the issues of transitions, what is the "right" way to move forward. In his remarks he focused closely on innovation and the challenges to enable, embrace, and channel innovation to ensure sustainable outcomes in a more urgent manner than can be observed to date.

24. The panel then explored how it might be possible to accelerate what "works" and how to redirect unsustainable trends. Because the world is attempting to achieve transitions under conditions of extreme uncertainty, what are the proper indicators of progress and have stakeholders been sufficiently innovative to address how to build the sustainable energy system of the future?

VI. High-level thematic discussions (agenda item 4)

25. The key messages that emerged from the panel discussion were that the world needs simple but understandable indicators, objectives, and policies that are both relevant to local market conditions and understandable at both the political and lay levels. It is essential that the world speeds up the support to innovation while ensuring sufficient policy stability to permit private capital to flow. Renewables currently require support and therefore are acquiring an image of being expensive, whereas if policymakers could drive toward an integrated systems perspective in managing, planning, and deploying infrastructure investments then it would be easier to increase the uptake of renewable technology significantly. The challenge is similar for energy efficiency - the real challenge is to improve the productivity of energy so that it is used and useful in a cost-effective construct. There needs to be effective integration of all dimensions of the future energy system.

26. On the other hand, there is no consensus on the transition to a low-carbon future because governmental priorities reflect local goals such as health or air pollution. Any

integrated approach to sustainable energy outcomes must consider that other sectors and other targets are also important and must be part of any solution. Subsidies throughout the energy system were mentioned repeatedly as deep market distortions to be avoided. It is critical to understand what the objective is, what the tools are to reach the objective, and how the tools might be deployed.

27. The representative of the European Union (EU) and its Member States said that for them energy efficiency and renewable energy are key to long term sustainable energy and climate policies. A truly transformative agenda needs to be clear on what we want, why we want it and how we will achieve it. On the "what" question the EU agreed in 2008 to reduce GHG emissions by 20% and increase renewables and energy efficiency by 20% and is on track to achieve those objectives by 2020. That is why on 23 October 2014, the European Council increased the level of ambition respectively to 40% and 27% by 2030. The "why" question can also be addressed since sustainable energy is good for the climate, for energy security, for public health and for the economy. The representative stressed the necessity to focus on the "can do's" and success stories instead of insisting on barriers and failures. His recommendation was for ECE to address the "how" question by providing decision makers with a menu of possible measures, technologies and standards. In the absence of a "one size fits all" solution, national decision makers are called to translate the menu into customised national action plans which could combine national political will with the expertise and support from different international actors. The representative stressed further the willingness of the EU to support activities through different programmes and financial instruments for neighbouring countries and Central Asia.

28. The Russian delegation proposed to use ECE expert capacities to assess pathways for the region to attain sustainable energy for all, taking into account environmental and economic factors in the further development of energy systems in the Pan-European region. The Russian delegation further requested the Bureau to explore possibilities of undertaking this initiative and to provide its conclusions and propositions to member States.

VII. General segment

29. The Acting Chair opened the session with a summary of the activities and discussions from the previous day, emphasizing the successful Geneva Energy Conversations held in collaboration with The Geneva Graduate Institute entitled: "Putting the genie back: 2 degrees will be harder than we think." The evening event is a first in a series of informal conversations intended to reach out to the Geneva, Swiss-based and international energy community with key messages about sustainable energy. Planning is in progress for three events in 2015.

30. The Acting Chair further reminded the Committee of the importance of taking a holistic approach to energy systems that should involve all sectors and above all integrate energy efficiency measures as the cheapest and most immediate option to achieving a low-carbon future. The open question is how to achieve speedy implementation? He asked the Committee to consider during the discussions the role of the Committee and the ECE region in this debate about sustainable energy, and to identify high impact areas for future work, including best practice guidance, standards and normative instruments.

31. The Acting Chair further proposed to the Committee that recommendations and conclusions be adopted as specific agenda items are discussed, rather than at the end of the Committee session on Friday afternoon.

32. The Committee agreed to this proposal.

VIII. How can energy efficiency uptake be accelerated? (agenda item 5)

33. Following a presentation by the International Energy Agency (IEA), a panel comprised of four international thought leaders on energy efficiency shared experience of which measures to increase the uptake of energy efficiency have been successful and how to disseminate them. Interventions stressed the very real concept of energy efficiency that had been examined in detail by the IEA in its market report series that provided concrete examples of a growing energy efficiency market. The discussion explored the multiple benefits concept and a possible ideal policy package for successful implementation of policy measures, including minimum energy efficiency performance standards, consumer information, and incentives. A specific case study was presented that focused on a policy package for commercial buildings. Buildings were presented as energy systems in their own right, meriting a holistic approach rather than the current haphazard approach taken by many governments. Belarus presented successful trends towards an energy efficiency society. Panellists agreed on two main high impact areas: (i) the importance of standards and normative instruments in the housing, transport and industry sectors; and (ii) increasing public awareness, already starting in school. Panellists further agreed that a heterogeneous, complex market like energy efficiency requires targeted and gradual policies combined with communication mechanisms and a smart policy mix.

34. The Director of the Sustainable Energy Division reported on the main developments from the first session of the Group of Experts on Energy Efficiency, held on 17–18 November 2014 in Geneva.

35. The main messages from the Group of Experts on Energy Efficiency included a positive approach to emphasize and accelerate what works to arrive at a flexible and comprehensive menu of measures and technologies for policymakers. Selected options could then be customized into national action plans as desired by individual countries. The Director further reported the recommendation by the Group of Experts to collaborate with the IEA Implementing Agreement for a Co-operative Programme on Smart Grids (ISGAN) on smart grids, and generally to seek collaborative implementation of the Work Plan for 2014–2015.

36. The Committee discussed the need for accurate energy statistics and the importance of standards to guide and increase the impact of energy efficiency approaches.

37. The representative of the EU and its Member States thanked the Chair and all experts for their work and highlighted the following points. First, the energy efficiency potential in the ECE region is substantial and "it can be done". The focus should be on success stories and positive messages with a view of repeating them. He also welcomed that the Group of Experts agreed to work on a menu of energy efficiency accelerators for decision makers: it should cover all main areas and in particular buildings, industry and utilities (with an emphasis on easy to apply measures). For other aspects ECE needs to rely on other actors (and in particular on the IEA) for work on policy and regulatory frameworks, and on the international financial institutions for work on investment responsiveness and funds. The final objective is to help countries pull these different elements together into national energy efficiency action plans.

38. On the basis of the discussion, the Committee:

(a) endorsed the conclusions and recommendations of the first meeting of the Group of Experts on Energy Efficiency, including the Work Plan of the Group of Experts on Energy Efficiency for 2014–2015, and requested the secretariat to submit the Work Plan for approval by the Executive Committee; and

(b) noted the study on standards related to energy efficiency in buildings undertaken by the ECE Committee on Housing and Land Management (ECE/HBP/2014/4) and requested the secretariat, in collaboration with the Committee on Housing and Land Management, to distil possible measures that could be included in a matrix on best-practices on energy efficiency.

IX. From source to use: the role of fossil fuels in delivering a sustainable energy future (agenda item 6)

Documentation: ECE/ENERGY/2014/5 – Recommendations to the United Nations Framework Convention on Climate Change on how carbon capture and storage in cleaner electricity production and through enhanced oil recovery could be used in reducing greenhouse gas emissions.

ECE/ENERGY/2014/6 – Application of the United Nations Framework Classification for Fossil Energy and Mineral Reserves and Resources 2009 to nuclear fuel resources.

39. Vice-Chair Mr. Jarad Daniels opened the discussions highlighting the need for a holistic approach when looking at energy issues and that no energy sources or technologies can be ignored if we are to meet future energy demand whilst responding to the challenge of climate change. He shared two videos: the first, was an animation developed by the World Business Council for Sustainable Development making the case for Carbon Capture and Storage (CCS) in the context of rising energy demand, a global net zero emissions target for society and the trillion tonne concept. The animation focused on conveying the size of the challenges ahead and provided a sense of scale to intangible concepts such as carbon dioxide emissions and large numbers such as a trillion tonnes of carbon. The second video showed the opening of the CCS project at the Boundary Dam power station, which is the world's first commercial scale, post-combustion CCS project at a coal-fired generating station. The project opened on 2 October 2014 in Saskatchewan, Canada.

40. The Chair of the Group of Experts on Cleaner Electricity Production from Fossil Fuels presented the ECE recommendations to the United Nations Framework Convention on Climate Change (UNFCCC) on how CCS in cleaner electricity production and through enhanced oil recovery could be used in reducing GHG emissions (ECE/ENERGY/2014/5). He outlined the inclusive and extensive consultation process of developing the recommendations.

41. The Committee endorsed the recommendations to the UNFCCC on how carbon capture and storage could contribute to reducing net GHG emissions (ECE/ENERGY/2014/5) and requested the ECE Executive Secretary to submit them to the secretariat of the UNFCCC on behalf of ECE and its member States for further action. The Committee called upon the ECE member States to consider the recommendations for their own purposes.

42. The Committee noted that the cover letter accompanying the recommendations should contain reference to the Intergovernmental Panel on Climate Change (IPCCC) Fifth Assessment Synthesis Report (AR5) and its finding that, without CCS, the cost of mitigation would increase by 138 per cent. The cover letter is to be developed by the secretariat in cooperation with the Chair of the Group of Experts on Cleaner Electricity Production from Fossil Fuels and other interested stakeholders. Fact sheets on CCS for policymakers, including examples of success stories, the environmental benefits and costs, are to be developed by the secretariat in cooperation with the Global CCS Institute.

43. A multi-stakeholder panel discussed the role of fossil fuels from source to use in delivering a sustainable energy future. Panellists addressed a range of issues, including: resource management and energy sustainability; methane management as a means to enhance economic growth and reduce GHG emissions; the need to progress development and deployment of CCS at scale if

carbon neutrality is to be achieved; the role of gas in delivering on the goals of SE4ALL, in particular in relation to energy access and economic development; unconventional fuel sources with an emphasis on shale gas and lessons learnt from the experience of the United States and whether it would be useful to map the shale gas resources in the ECE region; and the prospects for methane hydrates in the future energy mix. The challenge of reconciling the need for energy security and economic development with the need to protect the environment, also referred to as the "energy and natural resources" trilemma, was highlighted. Solutions need to be found that allow all three issues to be addressed in an integrated way.

44. In relation to CCS it was noted that the debate often focusses only on CCS from coal-fired power plants. Natural gas combined-cycle power plants with CO_2 capture and storage also have a role to play in climate change mitigation strategies.

45. The potential role for ECE in developing norms and standards in the area of methane management, gas flaring and unconventional fuel sources was raised. Some ECE member States expressed interest in pursuing work on resource mapping and developing best-practices in these areas, including shale gas and hydraulic fracturing, and will propose possible avenues for pursuing this work. Other ECE member States reserved their position on this issue.

46. The Committee requested that the relevant ECE expert groups prepare a coordinated, solutions-oriented report about methane management in extractive industries with a focus on establishing a baseline, benchmarking and scale of current methane emissions in those industries, with the aim of giving clear guidance to policymakers.

47. The Bridging Document between the Organisation for Economic Co-operation and Development Nuclear Energy Agency/International Atomic Energy Agency Uranium Classification and the United Nations Framework Classification for Fossil Fuel Energy and Mineral Reserves and Resources 2009 (ECE/ENERGY/2014/6) was presented. The Committee on Sustainable Energy endorsed the Bridging Document.

48. The Committee was briefed on the activities and status of implementation of the work plans of the Expert Group on Resource Classification, the Group of Experts on Cleaner Electricity Production from Fossil Fuels, the Group of Experts on Coal Mine Methane, and the Group of Experts on Gas.

49. On the basis of the discussion, the Committee:

(a) took note of the report of the fifth meeting of the Expert Group on Resource Classification, endorsed the extension of the Work Plan of the Expert Group on Resource Classification for 2013–2014 until the end of 2015 and requested the Expert Group on Resource Classification to prepare a work plan for 2016–2017;

(b) endorsed the Work Plan of the Group of Experts on Cleaner Electricity Production from Fossil Fuels for 2014–2015 and noted its approval by the Executive Committee;

(c) took note of the report of the sixth meeting of the Group of Experts on Coal Mine Methane, endorsed the Work Plan of the Group of Experts on Coal Mine Methane for 2014–2015, and noted the approval of the Work Plan by the Executive Committee; and

(d) took note of the report of the first meeting of the Group of Experts on Gas, including the Work Plan of the Group of Experts on Gas for 2014–2015, and noted the approval of the Work Plan by the Executive Committee.

X. How can renewable energy help optimize energy systems? (agenda item 7)

Documentation: ECE/ENERGY/2014/7 – Report on Renewable Energy in the ECE Region.

50. Vice-chair Ms. Nataliya Boytsun opened the session with a brief summary of previous agenda items.

51. Renewable energy represents one way to reduce the carbon intensity of the energy sector, improve energy security, and encourage economic development. Renewables are progressively integrating into the global energy mix, yet there is much more to be done. Renewables still require enduring support. The overall policy framework for energy does not take proper account of externalities, leading to market failures.

52. The introductory presentation focused on the integration of renewable energy technologies into current and future energy systems in the most optimum fashion. The presenter also explained the mission of the IEA Renewable Energy Technology Deployment (RETD) to accelerate the large-scale deployment of renewable energies. For the past years nine countries have been working together on a new energy architecture largely based on: energy efficiency/smart demand solutions (flexibility), electrification (more decentralised), renewable energy and other carbon-neutral technologies, geographically interconnected systems and trade, storage solutions (also across energy carriers), energy costs to society and redirection of energy strategy. Positive messages were presented about the feasibility of integrating renewables and remaining challenges and cost perspectives were outlined. The discussion about integration of renewable energy into systems touched on the relationship with fossil fuels and energy supply systems in general. RETD provided a roadmap to reach sustainable energy systems based on renewable energy, including mention of electrification and infrastructure investments and policy evolution through various stages of renewable energy penetration.

53. A panel comprised of international thought leaders on renewable energy and gas, including the chairs of the Group of Experts on Gas and the group's Task Force on Renewable Energy and Gas shared their views and experience. The discussion included addressing the question of how to do renewable energy "right" and the role of gas in increasing the uptake of renewable energy, particularly vis-à-vis the Work Plans of the two Groups of Experts on Gas and Renewable Energy.

54. Panellists agreed that for a sustainable energy future, a good balance of all energy sources was necessary and that building on the existing natural gas network combined with energy efficiency and smart integration of renewable energy was the most logical available option. Other aspects mentioned included decentralised gas systems with a view to a low-carbon future and power by pipe. The aspect of how to do renewable energy "right" involves knowing and integrating the right technologies at the right time and place in order to build the lowest cost opportunities. An example of the largest dispatchable biomass facility in North America was provided.

55. Views were presented on the role of natural gas in optimizing renewable energy. The newly created Task Force on Renewable Energy and Gas under the Group of Experts on Gas will start its work on defining the challenges. Important in this aspect will be future alliances and partnerships between renewable energy and gas providers. This alignment requires a systems approach, reliance on markets and key partnerships with changed priorities and a new market outlook. Panellists exchanged views on the complementarity and competitiveness of the two fuel sources during the transition to a more secure and low-carbon future. Proper alignment of the two depends on national circumstances, sector, legal systems, compensations, a systems approach, "functioning" market mechanisms, energy

pricing, a price on carbon, and future outlook. Steps taken today will have a huge impact on the future vision and implementation of a sustainable energy system.

56. As far as how the Groups of Experts on Gas and Renewable Energy should tackle the opportunities lying ahead for renewable energy and gas, proposals included involving external experts in the work of the Groups of Experts and their Task Forces, also electronically.

57. A member of the Bureau of the Group of Experts on Renewable Energy and the Director of the Sustainable Energy Division reported on the work of the Bureau and the main developments from the first session of the Group of Experts on Renewable Energy, 18–19 November 2014.

58. The Committee took note of the report of the first meeting of the Group of Experts on Renewable Energy, endorsed the Work Plan of the Group of Experts on Renewable Energy for 2014–2015, and requested the secretariat to submit the Work Plan for approval by the Executive Committee.

59. The Committee invited the secretariat to prepare a Renewable Energy Status Report for the ECE Region in 2015 in collaboration with key partners as a tool for tracking the uptake of renewable energy in the region and invited governments and other organizations to provide financial and/or in-kind expert support to its preparation.

XI. Matters related to future work of the Committee (agenda item 8)

Documentation: ECE/EX/7 - Decision on matters relating to the Committee on Sustainable Energy;

ECE/ENERGY/2014/1 – Cooperation and coordination with other intergovernmental and non-governmental organizations;

ECE/ENERGY/2014/2 – Update on regional advisory services;

ECE/ENERGY/2014/3 – Revised draft publication plan for 2014–2015;

ECE/ENERGY/2014/4 – Provisional calendar of meetings for 2015.

(a) Impact and visibility of the work of the Committee on Sustainable Energy

60. The ECE Executive Secretary opened a discussion on how the Committee and its subsidiary bodies can mobilize key stakeholders from all regions to obtain the objectives of the subprogramme. He stressed the importance of the Committee's work with regard to a post-2015 agenda on a low-carbon future. The Executive Secretary further stressed his wish for efficient and effective implementation of the work programmes targeting concrete outcomes.

61. Three bureau members, the chair of the Expert Group of Gas and member States were invited to provide views on the impact and visibility of the work of the Committee. The key takeaway discussion points included:

(a) ECE provides a unique platform to discuss questions related to sustainable energy, building on a diverse and important membership in the energy space. It allows the exchange of expert views and experience beyond borders and on cross-cutting issues in a

unique way. ECE has a leadership role in standard setting and can build on its convening power based on active participation from member States, technical experts, and other stakeholders. The Executive Secretary challenged the panellists to propose their thoughts on how this could be improved so that messages would also reach the ministerial level;

(b) The time is right to seek strategic partnerships with both established and new players, including the IEA, IRENA, the International Energy Forum and others, in order to enhance mutual activities and avoid duplication, but also to combine forces for bigger impact. This can be seen in the context of energy and economy, firstly strengthening links inside the United Nations family, in parallel reaching out to other regions outside the ECE region and other stakeholders;

(c) Panellists stressed the importance of focus and concentration, setting priorities for the work of the Committee and its subsidiary bodies, instead of diluting impact by spreading itself too thin. This should be seen in the context of value added by the Committee and the need to harmonize messages and efforts towards a common goal on the road to Paris, to increase the output and visibility of targeted outputs directly implementable for member States of the ECE region ("how to produce a good pudding");

(d) Panellists further offered views on how the key strengths of ECE can be maximised and disseminated. One example quoted was the recommendation to UNFCCC on how carbon capture and storage could contribute to reducing net GHG emissions (ECE/ENERGY/2014/5) and how this good work could be recognized globally, for example through the upcoming Clean Energy Ministerial;

(e) Additional thoughts included deepened engagement and communication with member States and the European Commission, creating a more extensive network and involvement in and with the capitals to ensure better dissemination of outputs and results, securing funds to enable travel of experts from member States. It was noted that capitals could host annual Committee meetings thereby increasing outreach and capacity building for relevant work areas. The timing and frequency of Committee meetings were also mentioned, however, it was stated that it was not a question of more meetings and reports that would drive the issues forward, but an increased involvement of national and international experts in a strategic fashion. In this context, a member State stressed the importance to enhance the potential of the subsidiary bodies in an integrated manner to underpin valuable work on, for example, the assessment of trends and optimum scenarios for sustainable energy in the ECE region;

(f) The delegation of the Russian Federation reconfirmed its support to the overall work of the Committee on Sustainable Energy, underscoring the need to better synergize and integrate the activities of subsidiary bodies by a common goal of practically contributing to sustainable development of the energy sector in the region.

62. Based on the discussion, the Committee:

(a) requested the Bureau to contribute to the reflections of the Executive Secretary on how to enhance the quality, impact and visibility of ECE work on sustainable energy, including through increased use of social networks;

(b) requested the Bureau, with the support of the secretariat and in collaboration with member States, to prepare a summary report on the concrete and results oriented activities undertaken and results achieved by the ECE in the area of sustainable energy for submission to the Executive Committee;

(c) noted that requests were made for additional extrabudgetary resources to implement the outcome of the work plans of the Committee and its subsidiary bodies and to enable increased participation of relevant experts;

(d) requested the secretariat to make increased use of electronic communications with member States and stakeholders on the deliverables of the work plans. Also requested the Secretariat to explore mechanisms for electronic communications with member States to enable timely decision making at formal sessions.

(b) Cooperation and coordination with other intergovernmental and non-governmental organizations

63. The Committee was invited to advise on ongoing cooperation with intergovernmental and non-governmental organizations, industry associations and the business community with a view to achieving synergies and complementarity of efforts and to avoid overlap and duplication. The usefulness of targeted reports per expert group was pointed out, led by the recent example of the Group of Experts on Renewable Energy.

64. The Committee noted the report on cooperation and coordination with other intergovernmental and non-governmental organizations, requested regular updates to the reports on activities of other actors so as to avoid duplication of efforts, and requested the expert groups to continue to report activities on a regular basis.

(c) Fifth International Forum on Energy for Sustainable Development

65. The Committee was informed of the outcomes from the Fifth International Forum on Energy for Sustainable Development held in Hammamet, Tunisia, 4–7 November 2014, including the Joint Statement of the Executive Secretaries of the five United Nations Regional Commissions. The Committee discussed possible next steps for the Joint Statement;

66. Member States congratulated the Executive Secretaries of the Regional Commissions for pulling together on the very important issue of sustainable energy: important in the quest to substantially reduce GHG emissions, to diversify our energy sources and increase energy security, it targets all major areas related to sustainable energy, including energy efficiency and providing a business case for renewable energy. Member States also welcomed that the Executive Secretaries have collectively signed up to the very straightforward objectives of the Secretary General's SE4All initiative;

67. Member States further noted that it is now up to each Regional Commission, within its respective mandates, to help its member States to start realizing these objectives immediately. In this regard, member States expressed their appreciation for the work carried out by experts on renewable energy and energy efficiency: they have drawn up work plans to establish menus of energy efficiency and renewable energy accelerators and to help countries in the region to translate these menus into customised energy efficiency and renewable energy action plans. The concrete outputs being produced by ECE experts on cleaner electricity production from fossil fuels, on coal mine methane, on gas, and on resource classification, can be added to these positive results.

68. The representative of the EU and its Member States acknowledged that ECE has thus moved towards working on very concrete and results oriented activities. It has moved away from working on large extrabudgetary projects and on macro issues, such as the investment responsiveness and the general regulatory framework of some of its member countries, simply because other international actors, such as the IEA and the international financial institutions are much better suited to carry out that work.

69. The United States noted that the energy sector is undergoing a profound transformation and that the ECE member states and other stakeholders have an opportunity

to shape the direction of these developments in order to promote economic and energy security, and to reduce carbon emissions in the energy sector and thereby tackle the challenge posed by climate change. The United States welcomed the work of the Committee on these pressing issues and stated the United States' support for the intent of the Joint Statement. The United States also noted that this statement is a non-binding document that can guide the work of the regional commissions and the member States, but does not commit either the commissions or the member States to any specific projects or activities. The United States cautioned that some of the specific language in the Joint Statement does not align with the language in other energy discussions – for example, the uses of "fair" versus "reliable" versus "universal" versus "equitable," or the use of the "price" versus "value" of carbon – and should not prejudice the other discussions underway. The United States further noted its understanding that the Joint Statement's reference to "local manufacturing" does not refer to any local content requirements, which could have implications in trade-related fora.

70. The delegation of the Russian Federation confirmed its support to the intent of the Joint Statement, underscoring its reservations regarding its approval procedures.

71. Based on the discussion, the Committee endorsed the intent of the Joint Statement of the Executive Secretaries of the United Nations Regional Commissions, held in Hammamet, Tunisia on 4–7 November 2014, and requested that the Sustainable Energy Subprogramme deliver concrete results on the different elements of the statement in accordance with existing mandates and work plans of its subsidiary bodies. The Committee also called upon the other Regional Commissions to consider doing likewise. The Committee further requested that the Executive Secretary bring the Joint Statement forward to the ECE Executive committee for further consideration.

(d) Update on regional advisory services

72. After a presentation by the ECE Regional Adviser on Sustainable Energy, the Committee noted the report on regional advisory services.

(e) Revised draft publication plan for 2014–2015

73. Taking into account recommendations made during the twenty-second session of the Committee, the Committee agreed to the revised draft publication plan for 2014–2015 (ECE/ENERGY/2014/3), noted the draft publication plan for 2016–2017, and requested that the titles be brought in line with respective work plans.

(f) Provisional calendar of meetings for 2015

74. The provisional calendar of meetings for 2015, including dates of the next Committee session, was presented. The Bureau of the Committee proposed an open-ended consultative meeting of the Committee be held on 27–28 May 2015 in Geneva. The meeting's objective is to review the progress of the implementation of the programme of work and consult with member States in preparation of the twenty-fourth session of the Committee.

75. The Committee agreed to the provisional calendar of meetings for 2015 (ECE/ENERGY/2014/4) with the proposed modifications as described in Annex I of this report and requested the secretariat to proceed with the preparations of the twenty-fourth session of the Committee on Sustainable Energy on 18–20 November 2015. It further requested the secretariat to review the schedule of Committee meeting dates for 2016 and

beyond to better align the meetings of the Committee with the work plans and the schedule of meetings of its subsidiary bodies.

76. The Committee agreed to hold an open-ended consultation of the Committee on Sustainable Energy on 27–28 May 2015.

(g) Other business

77. No business was raised under this agenda item.

XII. Adoption of the report and close of the meeting (agenda item 9)

Documentation: ECE/ENERGY/96 – Report of the Committee on Sustainable Energy on its twenty-third session.

78. The Acting-Chair of the Committee on Sustainable Energy decided to adopt the report of the twenty-third session of the Committee on Sustainable Energy (ECE/ENERGY/96) by written procedure for technical reasons as set forth in the Guidelines on procedures and practices for ECE bodies (ECE/CES/2014/53, para. 21).[1]

79. The meeting was closed at 18:50 hours on 21 November 2014.

[1] It was since clarified that reports of inter-governmental bodies of the United Nations are adopted by a decision at a formal meeting of the body itself by Members physically present and voting. The Bureau decided in its call on 16 January 2015 to adopt the report at the next formal meeting in November 2015 and to inform the Committee accordingly. Once conclusions and recommendations are formally adopted by the Committee, they constitute formal decisions of the Committee.

Annex I

Revised provisional calendar of meetings for 2015

Note by the secretariat

Mandate

The draft programme of work of the Committee on Sustainable Energy is prepared in the light of the Review of the 2005 reform of ECE and the decisions of the Commission at its sixty-fifth session. In relation to this mandate, the Committee on Sustainable Energy is invited to review the provisional calendar of meetings for 2015.

1. Gas Centre, Executive Board twentieth session, with the Group of Experts on Gas, 19 January 2015, Geneva.
2. Group of Experts on Gas, second session, 20–21 January 2015, Geneva.
3. Expert Group on Resource Classification, sixth session, 28 April–1 May 2015, Geneva.
4. Open-ended consultation of the Committee on Sustainable Energy, 27–28 May 2015, Geneva.
5. Group of Experts on Renewable Energy, second session, 12–13 October 2015, Geneva.
6. Group of Experts on Coal Mine Methane, tenth session, 28 October 2015, Geneva.
7. Group of Experts on Cleaner Electricity Production from Fossil Fuels, eleventh session, 30 October 2015, Geneva.
8. Group of Experts on Energy Efficiency, second session, 5–6 November 2015, Geneva.
9. Committee on Sustainable Energy, twenty-fourth session, 18–20 November 2015, Geneva.